

Amendments to the Drawings

Please substitute the attached ten (10) replacement sheets of formal drawings (including Figures 1-7, 8A, 8B, and 9), at the attached Appendix following page 15 of this paper, for the corresponding ten (10) sheets of drawings originally filed. No new matter has been entered.

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-30 are pending in the application, with claims 1, 23, and 28 being the independent claims. Claims 1, 6, 16, 17, 19, 20, 22, 23, and 28 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicants respectfully request that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Telephonic Interview

Applicants and Applicants' representative wish to thank Examiner Donald Mills for the telephonic interview (hereinafter "the Interview") with the Applicants' representative, Mr. Timothy Doyle, on March 31, 2009. During the interview, Applicants' representative and the Examiner discussed the differences between U.S. Patent No. 7,305,047 to Turner (hereinafter "Turner") and the embodiments of the present invention delineated by the claims. The substance of the Interview is incorporated in the following remarks.

Objection to the Specification

The Examiner, at page 2 of the Office Action, objected to the specification because paragraph [0002] fails to properly cite the application number of the commonly owned, copending application. Applicants have amended paragraph [0002] of the specification of the present patent application to cite properly the application number of the commonly owned, copending patent application. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the objection to the specification.

Objections to the Drawings

The Examiner, at page 2 of the Office Action, objected to the drawings because formal drawings are required. Please substitute the attached ten (10) replacement sheets of formal drawings (including Figures 1-7, 8A, 8B, and 9), at the attached Appendix following page 15 of this paper, for the corresponding ten (10) sheets of drawings originally filed. No new matter has been entered. Accordingly, Applicants respectfully request that the Examiner reconsider and withdraw the objections to the drawings.

Rejections Under 35 U.S.C. § 102

The Examiner, at page 3 of the Office Action, rejected claims 1-30 under 35 U.S.C. § 102(e) as allegedly being anticipated by Turner. Applicants respectfully traverse these rejections.

Claims 1-27

Independent claim 1 recites, *inter alia*, "transmitting an ordered set from the first hardware node after said transmitted A-ordered set and during an idle mode . . . the ordered set is different from ordered sets predefined by the IEEE Std 802.3ae specifications." (Emphasis added.) Independent claim 23 recites, *inter alia*, "a second logic circuit coupled to said first logic circuit and configured to ensure that said ordered set is substituted for one of a K-ordered set and an R-ordered set and transmitted during a clock cycle following a transmission of an A-ordered set and during an idle mode . . . said ordered set is different from ordered sets predefined by said IEEE Std 802.3ae specifications." (Emphasis added.) As discussed in the Interview and further explained below, Turner does not disclose, teach, or suggest at least these features.

Code groups and ordered sets are explained, for example, at paragraphs [0030] and [0031] and at figures 5 and 6 of the specification of the present patent application:

In IEEE Std 802.3ae, code groups are differentiated as either data code groups or special code groups. In each lane, if the control bit from the XGMII character is a zero, then the resulting code group is a data code group. 10GBASE-X 218 allows for 256 different data code groups. In each lane, if the control bit from the XGMII character is a one, then the resulting code group is a special code group. Clause 48 defines valid special code groups. FIG. 5 presents tables of IEEE Std 802.3ae valid code groups. Data code groups are annotated "Dx.y", where "x" is the decimal value of XGMII bits EDCBA (see FIG. 4), and "y" is the decimal value of XGMII bits HGF (see FIG. 4). Special code groups are similarly annotated "Kx.y". Code groups with bit combinations not specified in FIG. 5 are invalid.

IEEE Std 802.3ae also uses ordered sets of code groups. Each ordered set: (1) consists of combinations of special and data code groups, (2) is four code groups in length, and (3) begins in lane 0. Special code groups and ordered sets provide capabilities for error indication, packet delineation, column fill, synchronization, deskew, clock rate compensation, and link status reporting. An ordered set can be annotated as a sequential listing of its code groups with slash symbols ("/") used to differentiate lanes. For example, the sequence /Ka.b/Dc.d/De.f/Dg.h/ indicates that code group Ka.b is assigned to lane 0, code group Dc.d is assigned to lane 1, etc. An ordered set can also be annotated by a letter with a double bar symbol ("||") before and after the designator (e.g., ||Z||). FIG. 6 presents a table of predefined IEEE Std 802.3ae ordered sets and special code groups. In this table, use of data code group "Dx.y" at a position in a sequence indicates that any data code group can be used in that lane. The ordered sets of FIG. 6 are organized in groups, which are named for the functions they support: Idle, Encapsulation, and Link Status.

None of the embodiments in Turner discloses transmitting an ordered set after transmitting an A-ordered set and during an idle mode, wherein the ordered set is different from ordered sets predefined by the IEEE Std 802.3ae specifications. Therefore, each of claims 1 and 23 is not anticipated by Turner. Furthermore, because each of claims 2-22 and 24-27 depends from claims 1 or 23 and because of the individual distinctive features of each of claims 2-22 and 24-27, each of these claims is also not anticipated by Turner. Accordingly, Applicants respectfully request that the Examiner reconsider claims 1-27, withdraw the rejections of these claims under 35 U.S.C. § 102(e), and pass these claims to allowance.

Claims 28-30

Independent claim 28 recites, *inter alia*, "transmitting the message from a first hardware node of the network when the first hardware node is in the idle mode . . . wherein the message is different from the messages predefined by the protocol for transmission during the idle mode." (Emphasis added.) Turner does not disclose, teach, or suggest at least these features. Turner discloses transmitting only the Idle special code group when in the idle mode. The Idle special code group is predefined by the IEEE Std 802.3ae specification.

In addition to not disclosing transmitting, when in the idle mode, a message that is different from messages predefined by a protocol for transmission during the idle mode, Turner also does not disclose that "the message comprises a first portion that reports a link status condition" as recited in claim 29 (emphasis added) or that "the message further comprises a second portion that reports a cause of the link status condition" as recited in claim 30 (emphasis added).

Therefore, claims 28-30 are not anticipated by Turner. Accordingly, Applicants respectfully request that the Examiner reconsider claims 28-30, withdraw the rejections of these claims under 35 U.S.C. § 102(e), and pass these claims to allowance.

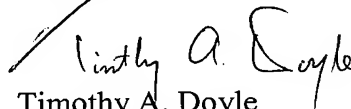
Conclusion

All of the stated grounds of objection and rejection have been properly traversed or accommodated. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicants believe that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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